
NNN	NNN	IIIIIIII	CCCCCCCCCCCC	NNN	NNN	FFFFFFF
NNN	NNN	IIIIIIII	CCCCCCCCCCCC	NNN	NNN	FFFFFFF
NNN	NNN	IIIIIIII	CCCCCCCCCCCC	NNN	NNN	FFFFFFF
NNN	NNN	III	CCC	NNN	NNN	FFF
NNN	NNN	III	CCC	NNN	NNN	FFF
NNN	NNN	III	CCC	NNN	NNN	FFF
NNNNNN	NNN	III	CCC	NNNNNN	NNN	FFF
NNNNNN	NNN	III	CCC	NNNNNN	NNN	FFF
NNNNNN	NNN	III	CCC	NNNNNN	NNN	FFF
NNN NNN NNN	NNN	III	CCC	NNN NNN NNN	NNN	FFFFFFF
NNN NNN NNN	NNN	III	CCC	NNN NNN NNN	NNN	FFFFFFF
NNN NNN NNN	NNN	III	CCC	NNN NNN NNN	NNN	FFFFFFF
NNN NNNNNN	NNN	III	CCC	NNN NNNNNN	NNN	FFF
NNN NNNNNN	NNN	III	CCC	NNN NNNNNN	NNN	FFF
NNN NNNNNN	NNN	III	CCC	NNN NNNNNN	NNN	FFF
NNN NNN	NNN	III	CCC	NNN NNN	NNN	FFF
NNN NNN	NNN	III	CCC	NNN NNN	NNN	FFF
NNN NNN	NNN	III	CCC	NNN NNN	NNN	FFF
NNN NNN	NNN	III	CCCCCCCCCCCC	NNN	NNN	FFF
NNN NNN	NNN	III	CCCCCCCCCCCC	NNN	NNN	FFF
NNN NNN	NNN	III	CCCCCCCCCCCC	NNN	NNN	FFF

FILEID**CNFSHOW

F 2

CCCCCCCC NN NN FFFFFFFF SSSSSSSS HH HH 000000 000000 WW WW
CCCCCCCC NN NN FFFFFFFF SSSSSSSS HH HH 00 00 WW WW
CC NN NN FF SS HH HH 00 00 WW WW
CC NN NN FF SS HH HH 00 00 WW WW
CC NNNN NN FF SS HH HH 00 00 WW WW
CC NNNN NN FF SS HH HH 00 00 WW WW
CC NN NN NN FFFFFFFF SSSSSS HHHHHHHHHHHHHH 00 00 WW WW
CC NN NN NN FFFFFFFF SSSSSS HHHHHHHHHHHHHH 00 00 WW WW
CC NN NNNN FF SS HH HH 00 00 WW WW
CC NN NNNN FF SS HH HH 00 00 WW WW
CC NN NN FF SS HH HH 00 00 WWWWWWWWWWWW
CC NN NN FF SS HH HH 00 00 WWWWWWWWWWWW
CCCCCCCC NN NN FF SSSSSSSS HH HH 000000 WW WW
CCCCCCCC NN NN FF SSSSSSSS HH HH 000000 WW WW
....
....

LL IIIII SSSSSSSS
LL IIIII SSSSSSSS
LL IIIII SS
LL IIIII SS
LL IIIII SS
LL IIIII SSSSSS
LL IIIII SSSSSS
LL IIIII SS
LL IIIII SS
LL IIIII SS
LL IIIII SS
LLLLLLLL LLLL IIIIII SSSSSSSS
LLLLLLLL LLLL IIIIII SSSSSSSS

```
0001 0 XTITLE 'DECnet Ethernet Configurator Module'
0002 0 MODULE CNFSHOW
0003 0 (
0004 0   LANGUAGE (BLISS32),
0005 0   IDENT = 'V04-000'
0006 0   )
0007 1 BEGIN
0008 1
0009 1 ****
0010 1 *
0011 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
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0025 1 *
0026 1 * DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
0027 1 * SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
0028 1 *
0029 1 *
0030 1 ****
0031 1 *
0032 1 *
0033 1 ++
0034 1 FACILITY: DECnet Configurator Module (NICONFIG)
0035 1
0036 1 ABSTRACT:
0037 1
0038 1   This module contains the routines to return information on a
0039 1   SHOW request generated by an NCP> SHOW MODULE CONFIGUTOR command.
0040 1
0041 1 ENVIRONMENT: VAX/VMS Operating System
0042 1
0043 1 AUTHOR: Bob Grosso, CREATION DATE: 13-Oct-1982
0044 1
0045 1 MODIFIED BY:
0046 1
0047 1 --
```

```
49      0048 1 %SBTTL 'Definitions'
50
51
52      0050 1 !
53      0051 1 | INCLUDE FILES:
54
55      0052 1 !
56      0053 1
57      0054 1 LIBRARY 'SYSSLIBRARY:STARLET'; ! VMS common definitions
58
59      0055 1 LIBRARY 'SHRLIBS:NMALIBRY'; ! NICE code definitions
60
61      0056 1 REQUIRE 'LIBS:CNFDEF.R32';
62
63      0057 1 REQUIRE 'SRC$:CNFPREFIX.REQ';
64
65      0058 1
66
67      0059 1
68      0060 1 | BUILTIN functions
69
70      0061 1
71      0062 1
72      0063 1 BUILTIN
73      0064 1     SUBM; ! To support quadword subtraction
74
75      0065 1
76      0066 1
77      0067 1
78      0068 1 | TABLE OF CONTENTS:
79
80      0069 1
81      0070 1 | FORWARD ROUTINE
82      0071 1
83      0072 1
84      0073 1
85      0074 1 | EXTERNAL REFERENCES:
86
87      0075 1
88      0076 1
89      0077 1 | EXTERNAL ROUTINE
90      0078 1
91      0079 1
92      0080 1
93      0081 1
94      0082 1
95      0083 1
96      0084 1
97      0085 1
98      0086 1
99      0087 1
100     0088 1
101     0089 1
102     0090 1
103
104
105
```

0049 1 %SBTTL 'Definitions'
0050 1 !
0051 1 | INCLUDE FILES:
0052 1 !
0053 1
0054 1 LIBRARY 'SYSSLIBRARY:STARLET'; ! VMS common definitions
0055 1 LIBRARY 'SHRLIBS:NMALIBRY'; ! NICE code definitions
0056 1 REQUIRE 'LIBS:CNFDEF.R32';
0057 1 REQUIRE 'SRC\$:CNFPREFIX.REQ';
0058 1
0059 1
0060 1 | BUILTIN functions
0061 1
0062 1
0063 1 BUILTIN
0064 1 SUBM; ! To support quadword subtraction
0065 1
0066 1
0067 1
0068 1 | TABLE OF CONTENTS:
0069 1
0070 1 | FORWARD ROUTINE
0071 1
0072 1
0073 1 | EXTERNAL REFERENCES:
0074 1 !
0075 1 | EXTERNAL ROUTINE
0076 1
0077 1 | Module CNFMAIN
0078 1
0079 1
0080 1
0081 1
0082 1 | Module CNFREQUES
0083 1
0084 1
0085 1
0086 1
0087 1
0088 1
0089 1
0090 1
0091
0092
0093
0094
0095
0096
0097
0098
0099
0100
0101
0102
0103
0104
0105

0049 1 %SBTTL 'Definitions'
0050 1 !
0051 1 | INCLUDE FILES:
0052 1 !
0053 1
0054 1 LIBRARY 'SYSSLIBRARY:STARLET'; ! VMS common definitions
0055 1 LIBRARY 'SHRLIBS:NMALIBRY'; ! NICE code definitions
0056 1 REQUIRE 'LIBS:CNFDEF.R32';
0057 1 REQUIRE 'SRC\$:CNFPREFIX.REQ';
0058 1
0059 1
0060 1 | BUILTIN functions
0061 1
0062 1
0063 1 BUILTIN
0064 1 SUBM; ! To support quadword subtraction
0065 1
0066 1
0067 1
0068 1 | TABLE OF CONTENTS:
0069 1
0070 1 | FORWARD ROUTINE
0071 1
0072 1
0073 1 | EXTERNAL REFERENCES:
0074 1 !
0075 1 | EXTERNAL ROUTINE
0076 1
0077 1 | Module CNFMAIN
0078 1
0079 1
0080 1
0081 1
0082 1 | Module CNFREQUES
0083 1
0084 1
0085 1
0086 1
0087 1
0088 1
0089 1
0090 1
0091
0092
0093
0094
0095
0096
0097
0098
0099
0100
0101
0102
0103
0104
0105

! Cover routine for common error handling of SHOW processing
! Format circuit info
! Format info for a system ID message.

! Clean up and exit
! Log messages to log file
! Free virtual memory
! Get zeroed virtual memory

! Locate circuit block from circuit name

! Buffer NICE response messages
! Buffer NICE error responses

```
106 0291 1 EXTERNAL
107 0292 1
108 0293 1 CNFSGQ_CIRSQLST : VECTOR [2]; ! List of circuits under surveillance
109 0294 1
110 0295 1 OWN
111 0296 1 NICE_DONE_DSC :
112 0297 1 BBLOCK [DSC$C_S_BLN] INITIAL
113 0298 1 (
114 0299 1     1,
115 0300 1     UPLIT (
116 0301 1     BYTE (XX'80')
117 0302 1     )
118 0303 1     ),
119 0304 1
120 0305 1 NICE_MORE_DSC :
121 0306 1 BBLOCK [DSC$C_S_BLN] INITIAL
122 0307 1 (
123 0308 1     4,
124 0309 1     UPLIT (
125 0310 1     BYTE (XX'02'),
126 0311 1     WORD (XX'FFFF'),
127 0312 1     BYTE (XX'00')
128 0313 1     )
129 0314 1     );

```

```
131 0315 1 %SBTTL 'CNF$PROCESS_SHOW Search the data base and format a response message'
132 0316 1 GLOBAL ROUTINE CNF$PROCESS_SHOW (IRB, KNOWN, CIRCUITNAM_DSC, INF_TYP) =
133 0317 1 ++
134 0318 1 FUNCTIONAL DESCRIPTION:
135 0319 1
136 0320 1
137 0321 1 Shell routine to supply a common entrance and error exit to the
138 0322 1 routine which builds the SHOW message.
139 0323 1
140 0324 1 FORMAL PARAMETERS:
141 0325 1
142 0326 1 irb Interrupt request block, contains context for returning
143 0327 1 responses to connectee.
144 0328 1
145 0329 1 known Was SHOW KNOWN CIRCUITS requested?
146 0330 1
147 0331 1 circuitnam_dsc Descriptor of circuit name if SHOW was requested for
148 0332 1 a specific circuit.
149 0333 1
150 0334 1 inftyp Code determining which information type was requested
151 0335 1 for the SHOW, either CHARACTERISTICS, SUMMARY or STATUS.
152 0336 1
153 0337 1 IMPLICIT INPUTS:
154 0338 1 NONE
155 0339 1
156 0340 1 IMPLICIT OUTPUTS:
157 0341 1 NONE
158 0342 1
159 0343 1 ROUTINE VALUE:
160 0344 1 COMPLETION CODES:
161 0345 1
162 0346 1 Always success, errors are buffered for return to connectee.
163 0347 1
164 0348 1 SIDE EFFECTS:
165 0349 1 NONE
166 0350 1
167 0351 1 --
168 0352 2 BEGIN
169 0353 2 LOCAL
170 0354 2 STATUS;
171 0355 2
172 0356 2 CNF$TRACE (DBGSC_TRACE, $DESCRIPTOR('TRACE'),
173 0357 2 $DESCRIPTOR ('CNF$PROCESS_SHOW'));
174 0358 2
175 0359 2
176 0360 2 | Send MORE message
177 0361 2
178 0362 2 EXECUTE (CNFSBUFR_NICE_MSG (.IRB, NICE_MORE_DSC, 0));
179 0363 2
180 0364 2
181 0365 2 | Request that the SHOW information be gathered, formatted and buffered.
182 0366 2
183 0367 2 STATUS = PROCESS_SHOW (.IRB, .KNOWN, .CIRCUITNAM_DSC, .INF_TYP);
184 0368 2 IF NOT .STATUS
185 0369 2 THEN
186 0370 2 CNFSBUFR_ERR_MSG (.IRB, NMASC_STS_MPR, 0, .STATUS);
187 0371 2
```

```

: 188 0372 2
: 189 0373 2 | Send DONE message
: 190 0374 2
: 191 0375 2 EXECUTE (CNFSBUFR_NICE_MSG (.IRB, NICE_DONE_DSC 0));
: 192 0376 2
: 193 0377 2 RETURN TRUE;
: 194 0378 1 END; ! Routine CNFSPROCESS_SHOW

```

```

.TITLE CNFSHOW DECnet Ethernet Configurator Module
.IDENT \V04-000\
.PSECT $PLITS,NOWRT,NOEXE,2

        80 00000 P.AAA: .BYTE -128
        00001 .BLKB 3
        02 00004 P.AAB: .BYTE 2
        00005 .WORD -1
        FFFF 00007 .BYTE 0
        00 00008 P.AAD: .ASCII \TRACE\
        0000D .BLKB 3
        00000005 00010 P.AAC: .LONG 5
        00000000 00014 .ADDRESS P.AAD
        45 43 41 52 54 00018 P.AAF: .ASCII \CNFSPROCESS_SHOW\
        57 00027 .LONG 16
        00000010 00028 P.AAE: .ADDRESS P.AAF
        00000000 0002C .PSECT $OWNS,NOEXE,2

        00000001 00000 NICE_DONE_DSC: .LONG 1
        00000000 00004 .ADDRESS P.AAA
        00000004 00008 NICE_MORE_DSC: .LONG 4
        00000000 0000C .ADDRESS P.AAB

        .EXTRN CNFSEXIT, CNFSTRACE
        .EXTRN CNFSFREE VM, CNFSGET_LVM
        .EXTRN CNFSLOCATE CIR BLK
        .EXTRN CNFSBUFR_NICE MSG
        .EXTRN CNFSBUFR_ERR MSG
        .EXTRN CNFSGQ_CIRSQLST

        .PSECT $CODES,NOWRT,2

        0000: 0000 00000 .ENTRY CNFSPROCESS_SHOW, Save nothing : 0316
        CF 9F 00002 PUSHAB P.AAE : 0357
        0000: 0000 00006 PUSHAB P.AAC : 0356
        CF 9F 0000A 01 DD 0000A PUSHBL #1
        0000G CF 03 FB 0000C CALLS #3, CNFSTRACE
        0000: 0000 00011 7E D4 00011 CLRL -(SP) : 0362
        CF 9F 00013 04 AC DD 00017 PUSHAB NICE_MORE_DSC
        0000G CF 03 FB 0001A 50 E9 0001F PUSHBL IRB
        33 7E 0C AC 7D 00022 CALLS #3, CNFSBUFR_NICE_MSG
        BLBC STATUS 2$ MOVO CIRCUITNAME_DSC, -(SP) : 0367

```

CNFSHOW
V04-000

DECnet Ethernet Configurator Module
CNFS\$PROCESS_SHOW Search the data base and for

L 2
16-Sep-1984 02:05:37 VAX-11 Bliss-32 V4.0-742
14-Sep-1984 12:49:54 [NICNF.SRC]CNFSHOW.B32;1

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0000V	7E	04	AC	7D	00026	MOVQ	IRB, -(SP)
	CF		04	FB	0002A	CALLS	#4, PROCESS_SHOW
	OF		50	E8	0002F	BLBS	STATUS, 1\$
			50	DD	00032	PUSHL	STATUS
			7E	D4	00034	CLRL	-(SP)
0000G	7E	04	CE	00036	MNEGL	#5, -(SP)	
	CF		AC	DD	00039	PUSHL	IRB
			04	FB	0003C	CALLS	#4, CNFSBUFR_ERR_MSG
			7E	D4	00041	CLRL	-(SP)
		0000'	CF	9F	00043	PUSHAB	NICE_DONE_DSC
0000G	04		AC	DD	00047	PUSHL	IRB
	CF		03	FB	0004A	CALLS	#3, CNFSBUFR_NICE_MSG
	03		50	E9	0004F	BLBC	STATUS, 2\$
	50		01	DD	00052	MOVL	#1, RC
			04	00055	2\$:	RET	

; Routine Size: 86 bytes, Routine Base: \$CODE\$ + 0000

```
196 0379 1 %SBTTL 'process show Search the data base and format a response message'
197 0380 1 ROUTINE PROCESS_SHOW (IRB, KNOWN, CIRCUITNAM_DSC, INFTYP) =
198 0381 1
199 0382 1 !++
200 0383 1 Locate requested circuit or dispatch for all known circuits to
201 0384 1 the routine which will format and buffer the SHOW response.
202 0385 1
203 0386 1 irb Interrupt request block, contains context for returning
204 0387 1 responses to connectee.
205 0388 1
206 0389 1 known Was SHOW KNOWN CIRCUITS requested?
207 0390 1
208 0391 1 circuitnam_dsc Descriptor of circuit name if SHOW was requested for
209 0392 1 a specific circuit.
210 0393 1
211 0394 1 inftyp Code determining which information type was requested
212 0395 1 for the SHOW, either CHARACTERISTICS, SUMMARY or STATUS.
213 0396 1
214 0397 1 Always return success, any errors will be buffered for return to
215 0398 1 connectee.
216 0399 1 --+
217 0400 1
218 0401 2 BEGIN
219 0402 2 MAP
220 0403 2 CIRCUITNAM_DSC : REF BBLOCK;
221 0404 2
222 0405 2 LOCAL
223 0406 2 CIR : REF BBLOCK;
224 0407 2
225 0408 2
226 0409 2 CNF$TRACE (DBG$C TRACE, $DESCRIPTOR('TRACE'),
227 0410 2 $DESCRIPTOR ('process_show'));
228 0411 2
229 0412 2 IF .KNOWN
230 0413 2 THEN
231 0414 2
232 0415 2 Format the data for all circuits
233 0416 2
234 0417 3 BEGIN
235 0418 3 CIR = .CNF$GQ_CIRSLURLST; ! List of circuits under surveillance
236 0419 3 WHILE .CIR NEQ CNF$GQ_CIRSLURLST DJ ! For the entire list of circuits
237 0420 4 BEGIN
238 0421 4 EXECUTE (SHOW_CIRCUIT (.IRB, .CIR, .INFTYP));
239 0422 4 CIR = .CIR [CIRSL_LINK]; ! Get next circuit in list
240 0423 3 END; ! While traversing list of circuits
241 0424 3
242 0425 2 ELSE
243 0426 3 BEGIN
244 0427 3
245 0428 3 Locate the requested circuit and format the data for it.
246 0429 3
247 0430 3 IF CNF$LOCATE_CIR_BLK (.CIRCUITNAM_DSC, CIR)
248 0431 3 THEN
249 0432 4 EXECUTE (SHOW_CIRCUIT (.IRB, .CIR, .INFTYP))
250 0433 3 ELSE
251 0434 4 BEGIN ! Oops, that circuit is not in the data base
252 0435 4 CNF$BUFR_ERR_MSG (.IRB, NMASC_STS_IDE, NMASC_ENT_CIR, 0, .CIRCUITNAM_DSC);
```

```
253 0436 4      RETURN TRUE;
254 0773 3      END;
255 0434 2      END;
256 0440 2      END;
257 0441 2      RETURN TRUE;
258 0442 1      END;
```

! Routine process_show

```
.PSECT $PLITS,NOWRT,NOEXE,2
45 43 41 52 54 00030 P.AAH: .ASCII \TRACE\
                               00035 .BLKB 3
                               00000005 00038 P.AAG: .LONG 5
                               00000000 0003C .ADDRESS P.AAH
77 6F 68 73 5F 73 73 65 63 6F 72 70 00040 P.AAJ: .ASCII \process_show\
                               0000000C 0004C P.AAI: .LONG 12
                               00000000 00050 .ADDRESS P.AAJ
```

```
.PSECT $CODE$,NOWRT,2
0000 00000 PROCESS_SHOW:
5E      04 C2 00002 .WORD Save nothing : 0380
        0000' CF 9F 00005 SUBL2 #4, SP
        0000' CF 9F 00009 PUSHAB P.AAI : 0410
        01 DD 0000D PUSHAB P.AAG : 0409
0000G  CF 03 FB 0000F CALLS #3, CNF$TRACE
24      08 AC E9 00014 BLBC KNOWN, 2S : 0412
6E      0000G CF D0 00018 MOVL CNF$GQ-CIR$URLST, CIR : 0418
50      0000G CF 9E 0001D 1$: MOVAB CNF$GQ-CIR$URLST, R0 : 0419
50      6E D1 00022 CMPL CIR, R0
        45 13 00025 BEQL 4$ : 0421
        10 AC DD 00027 PUSHL INF TYP
        04 AE DD 0002A PUSHL CIR
        04 AC DD 0002D PUSHL IRB
0000V  CF 03 FB 00030 CALLS #3, SHOW CIRCUIT
37      50 E9 00035 BLBC STATUS, 5$ : 0422
        9E DD 00038 PUSHL @CIR : 0416
        E1 11 0003A RRB 1$ : 0430
        5E DD 0003C 2$: PUSHL SP
        OC AC DD 0003E PUSHL CIRCUITNAM_DSC
0000G  CF 02 FB 00041 CALLS #2, CNF$LOCATE_CIR_BLK : 0432
12      50 E9 00046 BLBC R0, 3S
        10 AC DD 00049 PUSHL INF TYP
        04 AE DD 0004C PUSHL CIR
        04 AC DD 0004F PUSHL IRB
0000V  CF 03 FB 00052 CALLS #3, SHOW CIRCUIT
12      50 E8 00057 BLBS STATUS, 7$ : 0435
        04 0005A RET
7E      OC AC DD 0005B 3$: PUSHL CIRCUITNAM_DSC
7E      03 7D 0005E MOVQ #3, -(SP)
        09 CE 00061 MNEGQ #9, -(SP)
        04 AC DD 00064 PUSHL IRB
```

CNFSHOW
V04-000

DECnet Ethernet Configurator Module
process_show Search the data base and format

B 3

16-Sep-1984 02:05:37
14-Sep-1984 12:49:54

VAX-11 Bliss-32 V4.0-742
[NICNF.SRC]CNFSHOW:832;1

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0000G CF
50 05 FB 00067
01 D0 0006C 4\$: CALLS #5, CNF\$BUFR_ERR_MSG
04 0006F 5\$: MOVL #1, R0
RET

; 0441
; 0442

; Routine Size: 112 bytes, Routine Base: \$CODE\$ + 0056

```
261 0443 1 %SBTTL 'show circuit Format all systems for circuit'
262 0444 1 ROUTINE SHOW_CIRCUIT (IRB, CIR, INFtyp) =
263 0445 1
264 0446 1 !++
265 0447 1 Build the NICE for the SHOW response message and buffer it for
266 0448 1 transmission to the connectee.
267 0449 1
268 0450 1     irb      Interrupt request block, contains context for returning
269 0451 1             responses to connectee.
270 0452 1
271 0453 1     cir      Address of Circuit control block of circuit SHOW
272 0454 1             was requested for.
273 0455 1
274 0456 1     inftyp   Code determining which information type was requested
275 0457 1             for the SHOW, either CHARACTERISTICS, SUMMARY or STATUS.
276 0458 1
277 0459 1     Always return success, any errors will be buffered for return to
278 0460 1             connectee.
279 0461 1 --+
280 0462 1
281 0463 2     BEGIN
282 0464 2     MAP
283 0465 2         CIR : REF BBLOCK;
284 0466 2
285 0467 2     LOCAL
286 0468 2         CURRENT_TIMBUF : BBLOCK [8];
287 0469 2         DELTA_TIMBUF : BBLOCK [8];
288 0470 2
289 0471 2         NICE : REF BBLOCK,
290 0472 2         NICE_BUFDSC : BBLOCK [DSC$C_S_BLN],
291 0473 2         NICE_TMPDSC : BBLOCK [DSC$C_S_BLN];
292 0474 2         SID : REF BBLOCK
293 0475 2         TIMBUF : VECTOR [7, WORD];
294 0476 2
295 0477 2     BIND
296 0478 2         CONF = UPLIT (%ASCIC 'CONFIGURATOR') : VECTOR [,BYTE]; ! Module name to place into NICE return
297 0479 2
298 0480 2
299 0481 2         CNF$TRACE (DBGSC_TRACE, $DESCRIPTOR('TRACE'),
300 0482 2             $DESCRIPTOR ?'show_circuit'));
301 0483 2
302 0484 2
303 0485 2         ! Zero the descriptor which will locate the buffer where the NICE response
304 0486 2             will be built, allocate the buffer, and initialize buffer pointer.
305 0487 2
306 0488 2         CH$FILL (0, DSC$C_S_BLN, NICE_TMPDSC);
307 0489 2         EXECUTE (CNF$GET_ZVM (%REF (NICE_BUFLN), NICE_TMPDSC [DSC$A_POINTER]));
308 0490 2         NICE = .NICE_TMPDSC [DSC$A_POINTER];
309 0491 2
310 0492 2
311 0493 2         ! Place Error status
312 0494 2
313 0495 2         1 byte    return code
314 0496 2         2 bytes   error detail
315 0497 2         1 byte    length of error message
316 0498 2
317 0499 2         (.NICE) <0, 8> = %X'01'; ! Return code SUCCESS
```

```

318 0500 2 (.NICE) <8, 16> = XX'FFFF'; ! Error detail, SUCCESS
319 0501 2 (.NICE) <24, 8> = XX'00'; ! Error text length
320 0502 2
321 0503 2
322 0504 2 | Copy over the module entity, CONFIGURATOR
323 0505 2
324 0506 2 | 1 byte Length of CONFIGURATOR string
325 0507 2 | 12 bytes CONFIGURATOR string
326 0508 2
327 0509 2 (.NICE) <32, 8> = .CONF [0]; ! Length of CONFIGURATOR string
328 0510 2 NICE = .NICE + 5; ! Set pointer to beginning of circuit name
329 0511 2 CH$MOVE (.CONF [0], CONF [1], .NICE);
330 0512 2 NICE_TMPDSC [DSC$W_LENGTH] = 5 + .CONF [0];
331 0513 2 NICE = .NICE + .CONF [0]; ! Point to free space in buffer after
332 0514 2 the circuit name which was just copied in
333 0515 2
334 0516 2
335 0517 2 | Copy over Circuit name entity
336 0518 2
337 0519 2 | 2 bytes Circuit entity ID
338 0520 2 | 1 byte Parameter type = ASCII
339 0521 2 | 1 byte Length of circuit name
340 0522 2 | n bytes Circuit name
341 0523 2
342 0524 2 (.NICE) <0, 16> = NMASC_PCCN_CIR;
343 0525 2 (.NICE) <16, 8> = NMASC_PTY_AI;
344 0526 2 (.NICE) <24, 8> = .CIR [CIR$W_CIRNAMLEN]; ! Type = ASCII
345 0527 2 | Length of circuit name
346 0528 2 NICE = .NICE + 4; ! Set pointer to beginning of circuit name
347 0529 2 CH$MOVE (.CIR [CIR$W_CIRNAMLEN], CIR [CIR$T_CIRNAM], .NICE);
348 0530 2 NICE = .NICE + .CIR [CIR$W_CIRNAMLEN]; ! Point to free space in buffer after
349 0531 2 the circuit name which was just copied in
350 0532 2 NICE_TMPDSC [DSC$W_LENGTH] = .NICE_TMPDSC [DSC$W_LENGTH] + 4 + .CIR [CIR$W_CIRNAMLEN];
351 0533 2
352 0534 2 | Place in Surveillance parameter
353 0535 2 as a coded value
354 0536 2
355 0537 2 | 2 bytes Surveillance parameter ID
356 0538 2 | 1 byte Surveillance type = coded byte
357 0539 2 | 1 byte Surveillance value
358 0540 2
359 0541 2 (.NICE) <0, 16> = NMASC_PCCN_SUR;
360 0542 3 BEGIN
361 0543 3 BIND
362 0544 3 TYPE = .NICE + 2 : BBLOCK;
363 0545 3 TYPE [NMASV_PTY_COD] = TRUE; ! Surveillance is returned as a coded value
364 0546 3 TYPE [NMASV_PTY_CLE] = 1; ! The coded value is 1 byte in length
365 0547 2 END;
366 0548 2 (.NICE) <24, 8> = .CIR [CIR$B_SURVEIL];
367 0549 2 NICE = .NICE + 4; ! Set pointer to end of buffer where Elapsed Time will be pl
368 0550 2
369 0551 2
370 0552 2 | Place in Elapsed Time parameter
371 0553 2 as a coded multiple
372 0554 2
373 0555 2 | 2 bytes Elapsed Time parameter ID
374 0556 2 | 1 byte Elapsed time type = coded multiple of 3 fields

```

```

375 0557 2 | 1 byte   hours type = unsigned decimal word
376 0558 2 | 2 bytes  hours value
377 0559 2 | 1 byte   minutes type = unsigned decimal byte
378 0560 2 | 1 byte   minutes value
379 0561 2 | 1 byte   seconds type = unsigned decimal byte
380 0562 2 | 1 byte   seconds value
381 0563 2
382 0564 2 (.NICE) <0, 16> = NMASC_PCC4_ELT;           ! Set parameter ID
383 0565 3 BEGIN
384 0566 3 BIND
385 0567 3 CODMUL_TYP = .NICE + 2 : BBLOCK.
386 0568 3 HR_TYP = .NICE + 3 : BBLOCK,
387 0569 3 MIN_TYP = .NICE + 6 : BBLOCK,
388 0570 3 SEC_TYP = .NICE + 8 : BBLOCK;
389 0571 3
390 0572 3 CODMUL_TYP [NMASV_PTY_COD] = TRUE;           ! Elapsed Time is returned as a coded
391 0573 3 CODMUL_TYP [NMASV_PTY_MUL] = TRUE;           multiple.
392 0574 3 CODMUL_TYP [NMASV_PTY_CLE] = 3;             ! There are three fields in the coded multiple
393 0575 3
394 0576 3
395 0577 3 | Get the current system time, subtract
396 0578 3 | Time of Surveillance start from Current time
397 0579 3 | to get negative Delta time
398 0580 3
399 0581 3 EXECUTE ($GETTIM (TIMADR = CURRENT_TIMBUF));
400 0582 3 SUBM (2, CIR [CIR$Q ELAPSDTIM], CURRENT_TIMBUF, DELTA_TIMBUF);
401 0583 3 EXECUTE ($NUMTIM (TIMBUF = TIMBUF, TIMADR = DELTA_TIMBUF));
402 0584 3
403 0585 3 HR_TYP [NMASV_PTY_NTY] = NMASC_NTY_DU;         Unsigned decimal
404 0586 3 HR_TYP [NMASV_PTY_NLE] = 2;                   word.
405 0587 3 (.NICE) <32, T6> = .TIMBUF [3];            Hours
406 0588 3
407 0589 3 MIN_TYP [NMASV_PTY_NTY] = NMASC_NTY_DU;         Unsigned decimal
408 0590 3 MIN_TYP [NMASV_PTY_NLE] = 1;                   byte.
409 0591 3 (.NICE) <56, 85> = .TIMBUF [4];            Minutes
410 0592 3
411 0593 3 SEC_TYP [NMASV_PTY_NTY] = NMASC_NTY_DU;         Unsigned decimal
412 0594 3 SEC_TYP [NMASV_PTY_NLE] = 1;                   byte.
413 0595 3 (.NICE) <72, 85> = .TIMBUF [5];            Seconds
414 0596 2 END;
415 0597 2
416 0598 2 NICE_TMPDSC [DSC$W_LENGTH] = 14 + .NICE_TMPDSC [DSC$W_LENGTH];
417 0599 2
418 0600 2 SID = .CIR [CIR$L_SIDFLINK];                  ! Point to first System ID
419 0601 2
420 0602 2 IF (.SID EQL CIR [CIR$L_SIDFLINK]) OR           ! There are no ID's collected for this circuit
421 0603 3   ((.INF_TYP NEQ NMASC_OPINF_STA) AND           or Summary requested
422 0604 3     (.INF_TYP NEQ NMASC_OPINF_CHA))
423 0605 2 THEN
424 0606 2
425 0607 2 | Print only circuit info, not system ID's, since either
426 0608 2 | there are no ID's collected, or a SHOW SUMMARY was requested.
427 0609 2
428 0610 3 BEGIN
429 0611 3   CNFSBUFR_NICE_MSG (.IRB, NICE_TMPDSC, NICE_BUflen);
430 0612 3   RETURN TRUE;
431 0613 3 END

```

```

432 0614 3
433 0615 2 ELSE
434 0616 2
435 0617 2
436 0618 2
437 0619 2
438 0620 2
439 0621 3
440 0622 3 WHILE .SID NEQ CIR [CIR$L_SIDFLINK] DO ! For all the System ID's
441 0623 4 BEGIN
442 0624 4
443 0625 4
444 0626 4
445 0627 4
446 0628 4
447 0629 4
448 0630 4
449 0631 4 CH$FILL (0, DSC$C_S_BLN, NICE_BUFDSC);
450 0632 4 EXECUTE (CNF$GET_ZVM (%REF (NICE_BUFLEN), NICE_BUFDSC [DSC$A_POINTER]));
451 0633 4 CH$MOVE (.NICE_TMPDSC [DSC$W_LENGTH], .NICE_TMPDSC [DSC$A_POINTER],
452 0634 4 .NICE_BUFDSC [DSC$A_POINTER]);
453 0635 4 NICE_BUFDSC [DSC$W_LENGTH] = .NICE_TMPDSC [DSC$W_LENGTH];
454 0636 4
455 0637 4
456 0638 4
457 0639 4 Append the system ID info to the NICE response, and
458 0640 4 buffer the message for later transmission.
459 0641 4 Then follow list pointer to next system ID.
460 0642 4
461 0643 4 SHOW SYSTEM (.SID, NICE_BUFDSC);
462 0644 3 CNF$BUFR NICE_MSG (.IRB, NICE_BUFDSC, NICE_BUFLEN);
463 0645 3 SID = .SID [SID$L_LINK];
464 0646 3 END; ! While processing all system ID's for the circuit
465 0647 3
466 0648 3
467 0649 3
468 0650 2 EXECUTE (CNF$FREE_VM (%REF (NICE_BUFLEN), NICE_TMPDSC [DSC$A_POINTER]));
469 0651 2 END; ! There are system ID's for this circuit
470 0652 2
471 0653 1 RETURN TRUE;
END; ! Routine show_circuit

```

```

00 00 52 4F 54 41 52 55 47 49 46 4E 4F 43 0C 00054 P.AAK: .ASCII <12>\CONFIGURATOR\<0><0><0>
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00063 P.AAM: .ASCII \TRACE\
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00064 P.AAM: .BLKB 3
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00069 P.AAL: .LONG 5
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 0000005 P.AAO: .ADDRESS P.AAM
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 0000000 P.AAO: .ASCII \show_circuit\
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 0000000 P.AAN: .LONG 12
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 0000000 P.AAO: .ADDRESS P.AAO
CONF= P.AAK
.EXTRN SY$GETTIM, SY$NUMTIM

```

.PSECT \$CODE\$,NOWRT,2

000FC 00000 SHOW_CIRCUIT:

08 00 0000G 5E 0000' 34 C2 00002	.WORD Save R2,R3,R4,R5,R6,R7	0444
08 00 0000G 6E 0000' CF 9F 00005	SUBL2 #52, SP	0482
08 00 0000G 6E 0000' CF 9F 00009	PUSHAB P.AAN	0.81
08 00 0000G 6E 01 DD 0000D	PUSHAB P.AAL	
08 00 0000G 6E 03 FB 0000F	PUSHL #1	
08 00 0000G 6E 00 2C 00014	CALLS #3, CNF\$TRACE	
08 00 0000G 6E 14 AE 00019	MOVCS #0, (SP), #0, #8, NICE_TMPDSC	0488
08 00 0000G 04 AE 18 AE 9F 0001B	PUSHAB NICE_TMPDSC+4	0489
08 00 0000G 04 AE 80 8F 9A 0001E	MOVZBL #128, 4(SP)	
08 00 0000G 04 AE 04 AE 9F 00023	PUSHAB 4(SP)	
08 00 0000G 79 50 E9 0002B	CALLS #2, CNF\$GET_ZVM	
08 00 0000G 56 18 AE DO 0002E	BLBC STATUS, 1\$	
08 00 0000G 86 01 90 00032	MOVL NICE_TMPDSC+4, NICE	0490
08 00 0000G 86 01 AE 00035	MOVB #1, (NICE)+	0499
08 00 0000G 86 86 94 00038	MNEGW #1, (NICE)+	0500
08 00 0000G 57 0000' CF 9A 0003A	CLRB (NICE)+	0501
08 00 0000G 57 57 90 0003F	MOVZBL CONF, R7	0509
14 66 0000' CF 57 28 00042	MOVB R7, (NICE)+	
14 66 0000' CF 57 05 A1 00048	MOVCS R7, CONF+1, (NICE)	0511
14 66 0000' CF 56 57 C0 00040	ADDW3 #5, R7, NICE_TMPDSC	0512
14 66 0000' CF 86 64 8F 9B 00050	ADDL2 R7, NICE	0513
14 66 0000' CF 86 40 8F 90 00054	MOVZBW #100, (NICE)+	0524
14 66 0000' CF 57 08 AC DO 00058	MOVB #64, (NICE)+	0525
14 66 0000' CF 86 16 A7 90 0005C	MOVL CIR, R7	0526
14 66 18 66 16 A7 28 00060	MOVB 22(R7), (NICE)+	0528
14 66 18 66 16 A7 32 00066	MOVCS 22(R7), 24(R7), (NICE)	0529
14 66 18 66 50 C0 0006A	CVTWL 22(R7), R0	
14 66 18 66 50 14 AE 3C 0006D	ADDL2 R0, NICE	
14 66 18 66 51 16 A7 32 00071	MOVZWL NICE_TMPDSC, R0	0531
14 66 18 66 50 16 A7 32 00075	CVTWL 22(R7), R1	
14 AE 50 04 A1 00078	ADDL2 R1, R0	
86 06 00 86 6E 8F 9B 0007D	ADDW3 #4, R0, NICE_TMPDSC	
86 06 00 86 80 8F 88 00081	MOVZBW #110, (NICE)+	0541
86 06 02 A6 00 01 F0 00085	BISB2 #128, (NICE)	0545
86 06 02 A6 00 01 A7 90 0008A	INSV #1, #0, #6, (NICE)+	0546
86 06 02 A6 00 2C AE 03 F0 00097	MOVB 10(R7), (NICE)+	0548
02 A6 00 01 FB 000A0	MOVZBW #111, (NICE)	0564
02 A6 00 01 50 E9 000A7 1\$:	BISB2 #192, 2(NICE)	0573
24 AE 2C AE 30 A7 C3 000AA	INSV #3, #0, #6, 2(NICE)	0574
24 AE 2C AE 30 AE DO 000B1	PUSHAB CURRENT_TIMBUF	0581
24 AE 2C AE 34 A7 D9 000B6	CALLS #1, SYS\$GETTIM	
24 AE 2C AE 24 AE 9F 000B6	BLBC STATUS, 2\$	
24 AE 2C AE 08 AE 9F 000BE	SUBL3 48(R7), CURRENT_TIMBUF, DELTA_TIMBUF	0582
03 A6 04 00 02 FB 000C1	MOVL CURRENT_TIMBUF, DELTA_TIMBUF	
03 A6 04 00 02 F0 000CF	SBWC 52(R7), DELTA_TIMBUF	0583
03 A6 04 0A AE B0 000DS	PUSHAB DELTA_TIMBUF	
03 A6 04 0A AE B0 000DS	PUSHAB TIMBUF	
03 A6 04 0A AE B0 000DS	CALLS #2, SYS\$NUMTIM	
03 A6 04 0A AE B0 000DS	BLBC STATUS, 5\$	
03 A6 04 0A AE B0 000DS	BICB2 #48, 3(NICE)	0585
03 A6 04 0A AE B0 000DS	INSV #2, #0, #4, 3(NICE)	0586
03 A6 04 0A AE B0 000DS	MOVW TIMBUF+6, 4(NICE)	0587

06 A6	04	06 A6	30 8A 000DA	BICB2	#48, 6(NICE)	0589
		00	01 F0 000DE	INSV	#1, #0, #4, 6(NICE)	0590
		07 A6	0C AE 90 000E4	MOVB	TIMBUF+8, 7(NICE)	0591
		08 A6	30 8A 000E9	BICB2	#48, 8(NICE)	0593
08 A6	04	00	01 FC 000ED	INSV	#1, #0, #4, 8(NICE)	0594
		09 A6	0E AE 90 000F3	MOVB	TIMBUF+10, 9(NICE)	0595
		14 AE	0E A0 000F8	ADDW2	#14, NICE TMPDSC	0598
		56	40 A7 D0 000FC	MOVL	64(R7), SID	0600
		50	40 A7 9E 00100	MOVAB	64(R7), R0	0602
		50	56 D1 00104	CMPL	SID, R0	
			0C 13 00107	BEQL	3\$	
		01	0C AC D1 00109	CMPL	INF TYP, #1	0603
		02	0C AC D1 0010F	BEQL	4\$	0604
			11 13 00113	CMPL	INF TYP, #2	
		7E	80 8F 9A 00115	BEQL	4\$	
			18 AE 9F 00119	MOVZBL	#128, -(SP)	0611
			04 AC DD 0011C	PUSHAB	NICE_TMPDSC	
		0000G CF	03 FB 0011F	PUSHL	IRB	
			60 11 00124	CALLS	#3, CNFSBUFR_NICE_MSG	
		50	40 A7 9E 00126	BRB	7\$	0612
		50	56 D1 0012A	MOVAB	64(R7), R0	0622
08	00	6E	44 13 0012D	CMPL	SID, R0	
			00 2C 0012F	BEQL	6\$	
			1C AE 00134	MOVC5	#0, (SP), #0, #8, NICE_BUFDSC	0630
		04 AE	20 AE 9F 00136	PUSHAB	NICE_BUFDSC+4	0631
			80 8F 9A 00139	MOVZBL	#128, 4(SP)	
		0000G CF	04 AE 9F 0013E	PUSHAB	4(SP)	
		40	02 FB 00141	CALLS	#2, CNFSGET_ZVM	
20 BE	18 BE	14 AE	50 E9 00146	BLBC	STATUS, 8\$	
	1C AE	14 AF	28 00149	MOVC3	NICE_TMPDSC, @NICE_TMPDSC+4, @NICF_BUFDSC+4	0633
		1C AE	B0 00150	MOVW	NICE_TMPDSC, NICE_BUFDSC	0634
			9F 00155	PUSHAB	NICE_BUFDSC	0641
		56	56 DD 00158	PUSHL	SID	
		0000V CF	02 FB 0015A	CALLS	#2 SHOW SYSTEM	
		7E	80 8F 9A 0015F	MOVZBL	#128, -(SP)	0642
			20 AE 9F 00163	PUSHAB	NICE_BUFDSC	
		04 AC DD 00166	PUSHL	IRB		
		0000G CF	03 FB 00169	CALLS	#3, CNFSBUFR_NICE_MSG	
		56	66 D0 0016E	MOVL	(SID), SID	0643
			B3 11 00171	BRB	4\$	0622
		04 AE	18 AE 9F 00173	PUSHAB	NICE_TMPDSC+4	0649
			80 8F 9A 00176	MOVZBL	#128, 4(SP)	
		0000G CF	04 AE 9F 0017B	PUSHAB	4(SP)	
		03	02 FB 0017E	CALLS	#2, CNFSFREE_VM	
		50	50 E9 00183	BLBC	STATUS, 8\$	
			01 D0 00186	MOVL	#1, R0	0652
			04 00189	RET		0653

; Routine Size: 394 bytes. Routine Base: \$CODE\$ + 00C6

```
473 0654 1 %SBTTL 'show_system Format System ID info'  
474 0655 1 ROUTINE SHOW_SYSTEM (SID, NICEBUF) =  
475 0656 1  
476 0657 1 ++  
477 0658 1 Format the information in the system ID message stored in  
478 0659 1 SID and build a NICE message which will be appended to the  
479 0660 1 NICE message for the circuit which is in NICEBUF.  
480 0661 1  
481 0662 1 sid Pointer to buffer containing a system ID message  
482 0663 1  
483 0664 1 nicebuf Descriptor of buffer containing circuit NICE message  
484 0665 1  
485 0666 1 Always return success. There is no error checking.  
486 0667 1  
487 0668 1 --  
488 0669 2 BEGIN  
489 0670 2 MAP  
490 0671 2 NICEBUF : REF BBLOCK,  
491 0672 2 SID : REF BBLOCK;  
492 0673 2 LOCAL  
493 0674 2 NICE : REF BBLOCK,  
494 0675 2 TIMBUF : VECTOR [?, WORD];  
495 0676 2  
496 0677 2 CNF$TRACE (DBG$C_TRACE, $DESCRIPTOR('TRACE'),  
497 0678 2 $DESCRIPTOR (?'show_system'));  
498 0679 2  
499 0680 2 NICE = .NICEBUF [DSC$A_POINTER] + .NICEBUF [DSC$W_LENGTH];  
500 0681 2  
501 0682 2  
502 0683 2 | Place in Physical Address parameter  
503 0684 2 | as a Hex Image 6  
504 0685 2  
505 0686 2 | 2 bytes Physical Address parameter ID  
506 0687 2 | 1 byte Physical Address type = Hex Image (HI-6)  
507 0688 2 | 6 bytes Physical Address value  
508 0689 2  
509 0690 2 (.NICE) <0, 16> = NMASC_PCCN_PHA;  
510 0691 3 BEGIN  
511 0692 3 BIND  
512 0693 3 TYPE = .NICE + 2 : BBLOCK;  
513 0694 3 TYPE [NMASV_PTY_NTY] = NMASC_NTY_H; ! returned as a Hex  
514 0695 3 TYPE [NMASV_PTY_NLE] = NMASC_NLE_IMAGE; ! image.  
515 0696 2 END;  
516 0697 2 (.NICE) <24,8> = SID$C_ADRLEN;  
517 0698 2 CH$MOVE (SID$C_ADRLEN, SID [SID$T_CURADR], (.NICE + 4));  
518 0699 2 NICE = .NICE + 4 + SID$C_ADRLEN; ! Set pointer to end of buffer where next parameter will be
```

```

520 0700 2
521 0701 2
522 0702 2
523 0703 2
524 0704 2
525 0705 2
526 0706 2
527 0707 2
528 0708 2
529 0709 2
530 0710 2
531 0711 2
532 0712 2
533 0713 2
534 0714 2
535 0715 2
536 0716 2
537 0717 2
538 0718 3
539 0719 3
540 0720 3
541 0721 3
542 0722 3
543 0723 3
544 0724 3
545 0725 3
546 0726 3
547 0727 3
548 0728 3
549 0729 3
550 0730 3
551 0731 3
552 0732 3
553 0733 3
554 0734 3
555 0735 3
556 0736 3
557 0737 3
558 0738 3
559 0739 3
560 0740 3
561 0741 3
562 0742 3
563 0743 3
564 0744 3
565 0745 3
566 0746 3
567 0747 3
568 0748 3
569 0749 3
570 0750 3
571 0751 3
572 0752 2
573 0753 2
574 0754 2

Place in Last Report parameter
as a coded multiple

2 bytes    Last Report parameter ID
1 byte     Last Report type = coded multiple of 5 fields
1 byte     Day type = unsigned decimal byte
1 byte     Day value
1 byte     Month type = Coded byte
1 byte    Month coded value
1 byte    hour type = unsigned decimal byte
1 byte    hour value
1 byte    minutes type = unsigned decimal byte
1 byte    minutes value
1 byte    seconds type = unsigned decimal byte
1 byte    seconds value

(.NICE) <0, 16> = NMASC_PCCN_LRP;
BEGIN
BIND
  CODMUL_TYP = .NICE + 2 : BBLOCK,
  DAY_TYP = .NICE + 3 : BBLOCK,
  MON_TYP = .NICE + 5 : BBLOCK,
  HR_TYP = .NICE + 7 : BBLOCK,
  MIN_TYP = .NICE + 9 : BBLOCK,
  SEC_TYP = .NICE + 11 : BBLOCK;

  CODMUL_TYP [NMASV_PTY_COD] = TRUE;           ! Last Report is returned as a coded
  CODMUL_TYP [NMASV_PTY_MUL] = TRUE;           multiple.
  CODMUL_TYP [NMASV_PTY_CLE] = 5;              ! There are five fields in the coded multiple

EXECUTE ($NUMTIM (TIMBUF = TIMBUF, TIMADR = SID [SID$Q_LSTREPORT]) );

  DAY_TYP [NMASV_PTY_NTY] = NMASC_NTY_DU;      ! Unsigned decimal
  DAY_TYP [NMASV_PTY_NLE] = 1;                  byte.
  (.NICE) <32, 85 = .TIMBUF [2];               Day

  MON_TYP [NMASV_PTY_COD] = TRUE;               ! Month is returned as a coded value
  MON_TYP [NMASV_PTY_CLE] = 1;                  contained in 1 byte.
  (.NICE) <48, 85 = .TIMBUF [1];               Month

  HR_TYP [NMASV_PTY_NTY] = NMASC_NTY_DU;      ! Unsigned decimal
  HR_TYP [NMASV_PTY_NLE] = 1;                  byte.
  (.NICE) <64, 8> = .TIMBUF [3];              Hour

  MIN_TYP [NMASV_PTY_NTY] = NMASC_NTY_DU;      ! Unsigned decimal
  MIN_TYP [NMASV_PTY_NLE] = 1;                  byte.
  (.NICE) <80, 85 = .TIMBUF [4];              Minute

  SEC_TYP [NMASV_PTY_NTY] = NMASC_NTY_DU;      ! Unsigned decimal
  SEC_TYP [NMASV_PTY_NLE] = 1;                  byte.
  (.NICE) <96, 85 = .TIMBUF [5];              Second

END;
NICE = .NICE + 13;

```

576 0755 2
577 0756 2 | Place in Maintenance Version parameter
578 0757 2 as a coded multiple
579 0758 2
580 0759 2 2 bytes Maintenance Version parameter ID
581 0760 2 1 byte Maintenance Version type = coded multiple of 3 fields
582 0761 2 1 byte Version Number type = unsigned decimal byte
583 0762 2 1 byte Version Number value
584 0763 2 1 byte ECO number type = unsigned decimal byte
585 0764 2 1 byte ECO number value
586 0765 2 1 byte User ECO number type = unsigned decimal byte
587 0766 2 1 byte User ECO value
588 0767 2
589 0768 2 (.NICE) <0, 16> = NMASC_PCCN_MVR;
590 0769 3 BEGIN
591 0770 3 BIND
592 0771 3 CODMUL_TYP = .NICE + 2 : BBLOCK,
593 0772 3 VN_TYP = .NICE + 3 : BBLOCK,
594 0773 3 EN_TYP = .NICE + 5 : BBLOCK,
595 0774 3 UEN_TYP = .NICE + 7 : BBLOCK;
596 0775 3
597 0776 3 CODMUL_TYP [NMASV_PTY_COD] = TRUE;
598 0777 3 CODMUL_TYP [NMASV_PTY_MUL] = TRUE;
599 0778 3 CODMUL_TYP [NMASV_PTY_CLE] = 3;
600 0779 3
601 0780 3 VN_TYP [NMASV_PTY_NTY] = NMASC_NTY_DU;
602 0781 3 VN_TYP [NMASV_PTY_NLE] = 1;
603 0782 3 (.NICE) <32, 8> = .SID [SID\$B_MOPVER];
604 0783 3
605 0784 3 EN_TYP [NMASV_PTY_NTY] = NMASC_NTY_DU;
606 0785 3 EN_TYP [NMASV_PTY_NLE] = 1;
607 0786 3 (.NICE) <48, 8> = .SID [SID\$B_MOPECO];
608 0787 3
609 0788 3 UEN_TYP [NMASV_PTY_NTY] = NMASC_NTY_DU;
610 0789 3 UEN_TYP [NMASV_PTY_NLE] = 1;
611 0790 3 (.NICE) <64, 85 = .SID [SID\$B_MOPUSRECO];
612 0791 2 END;
613 0792 2
614 0793 2 NICE = .NICE + 9;
615 0794 2

| Maintenance Version is returned as a coded multiple.
| There are three fields in the coded multiple
| Unsigned decimal byte.
| MOP version
| Unsigned decimal byte.
| MOP ECO
| Unsigned decimal byte.

```

617 0795 2
618 0796 2 | Place in Functions parameter
619 0797 2 | as a coded multiple
620 0798 2
621 0799 2 | 2 bytes Functions parameter ID
622 0800 2 | 1 byte Functions type = coded multiple of up to 16 fields
623 0801 2 | n bytes Function type = Coded byte
624 0802 2
625 0803 2 | up to 16 functions permitted
626 0804 2
627 0805 2
628 0806 2
629 0807 2
630 0808 3
631 0809 3
632 0810 3
633 0811 3
634 0812 3
635 0813 3 | Place in Function parameter ID
636 0814 3 | Report is returned as a coded
637 0815 3 | multiple.
638 0816 3
639 0817 3
640 0818 3
641 0819 3
642 0820 3
643 0821 4
644 0822 4
645 0823 4
646 0824 4
647 0825 4
648 0826 4
649 0827 5
650 0828 5 | Functions are returned as a coded value
651 0829 5 | contained in 1 byte.
652 0830 5 | Place Function value in NICE message
653 0831 5 | Advance to end of NICE buffer
654 0832 4
655 0833 3
656 0834 2

IF .SID [SID$B_NUMFUNC] NEQ 0
THEN
  BEGIN
    BIND
      CODMUL_TYP = .NICE + 2 : BBLOCK,
      FUNCTIONS = SID [SID$W_FUNCTIONS] : BITVECTOR [16];
      (.NICE) <0, 16> = NMASC_P[CN_FCT];
      CODMUL_TYP [NMASV_PTY_COD] = TRUE;
      CODMUL_TYP [NMASV_PTY_MUL] = TRUE;
      CODMUL_TYP [NMASV_PTY_CLE] = .SID [SID$B_NUMFUNC];
      NICE = .NICE + 3;           ! 16 fields are permitted in the coded multi

      INCR INDEX FROM 0 TO SIDSC_MAXFUNC - 1 DO
        BEGIN
          BIND
            FUN_TYP = .NICE : BBLOCK;
            IF .FUNCTIONS [.INDEX]
            THEN
              BEGIN
                FUN_TYP [NMASV_PTY_COD] = TRUE;
                FUN_TYP [NMASV_PTY_CLE] = 1;
                (.NICE) <8, 8> = .INDEX;
                NICE = .NICE + 2;
              END;
            END;
        END;
  END;

```

```

658 0835 2
659 0836 2 | Place in Hardware Address parameter
660 0837 2 | as a Hex Image 6
661 0838 2
662 0839 2 | 2 bytes Hardware Address parameter ID
663 0840 2 | 1 byte Hardware Address type = Hex Image (HI-6)
664 0841 2 | 1 byte Image length = 6
665 0842 2 | 6 bytes Hardware Address value
666 0843 2
667 0844 2 | (.NICE) <0, 16> = NMASC_PCCN_HWA;
668 0845 3 | BEGIN
669 0846 3 | BIND
670 0847 3 | TYPE = .NICE + 2 : BBLOCK;
671 0848 3 | TYPE [NMASV_PTY_NTY] = NMASC_NTY_H; | returned as a Hex
672 0849 3 | TYPE [NMASV_PTY_NLE] = NMASC_NLE_IMAGE; | image
673 0850 2 | END;
674 0851 2 | (.NICE) <24,8> = SIDSC_ADRLEN; ! of length 6
675 0852 2 | CHSMOVE (SID$C_ADRLEN, SID [SID$T_HRDWADR], (.NICE + 4)); ! Set pointer to end of buffer where next parameter
676 0853 2 | NICE = .NICE + 4 + SID$C_ADRLEN; ! Set pointer to end of buffer where next parameter
677 0854 2
678 0855 2
679 0856 2
680 0857 2 | Place in Device Type parameter
681 0858 2 | as a coded value
682 0859 2
683 0860 2 | 2 bytes Device Type parameter ID
684 0861 2 | 1 byte Device Type type = coded byte
685 0862 2 | 1 byte Device Type code
686 0863 2
687 0864 2 | (.NICE) <0, 16> = NMASC_PCCN_DTY;
688 0865 3 | BEGIN
689 0866 3 | BIND
690 0867 3 | TYPE = .NICE + 2 : BBLOCK;
691 0868 3 | TYPE [NMASV_PTY_COD] = TRUE; | Device Type is returned as a coded value
692 0869 3 | TYPE [NMASV_PTY_CLE] = 1; | The coded value is 1 byte in length
693 0870 2 | END;
694 0871 2 | (.NICE) <24, 8> = .SID [SID$B_DEVICE];
695 0872 2 | NICE = .NICE + 4; ! Set pointer to end of buffer where Elapsed Time will be pl
696 0873 2
697 0874 2 | NICEBUF [DSC$W_LENGTH] = .NICE - .NICEBUF [DSC$A_POINTER];
698 0875 2
699 0876 2 | RETURN TRUE;
700 0877 1 | END; : Routine show_system

```

.PSECT SPLIT\$,NOWRT,NOEXE,2

45 43 41 52 54 00088	P.AAQ:	.ASCII \TRACE\	:
00000005 00080		.BLKB 3	:
00000000 00090	P.AAP:	.LONG 5	:
00000000 00094		.ADDRESS P.AAQ	:
6D 65 74 73 79 73 5F 77 6F 68 73 00098	P.AAS:	.ASCII \show_system\	:
00000008 000A3		.BLKB 1	:
00000000 000A4	P.AAR:	.LONG 11	:
00000000 000A8		.ADDRESS P.AAS	:

.PSECT SCODES,NOWRT,2

01FC 00000 SHOW_SYSTEM:

; Routine Size: 317 bytes, Routine Base: \$CODE\$ + 0250

CNFSHOW
V04-000

DECnet Ethernet Configurator Module
show_system Format System ID info

C 4
16-Sep-1984 02:05:37
14-Sep-1984 12:49:54

VAX-11 Bliss-32 V4.0-742
[NICNF.SRC]CNFSHOW.B32;1

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(11)

: 702 0878 1 END
: 703 0879 0 ELUDOM

: ! End of module CNFSHOW

PSECT SUMMARY

Name	Bytes	Attributes
SPLITS	172	NOVEC,NOWRT, RD ,NOEXE,NOSHR, LCL, REL, CON,NOPIC,ALIGN(2)
SOWNS	16	NOVEC, WRT, RD ,NOEXE,NOSHR, LCL, REL, CON,NOPIC,ALIGN(2)
\$CODES	909	NOVEC,NOWRT, RD , EXE,NOSHR, LCL, REL, CON,NOPIC,ALIGN(2)

Library Statistics

File	----- Symbols -----	Total	Loaded	Percent	Pages Mapped	Processing Time
-\$255\$DUA28:[SYSLIB]STARLET.L32;1	9776	8	0	0	581	00:01.0
-\$255\$DUA28:[SHRLIB]NMALIBRY.L32;1	887	23	2	2	47	00:00.7

COMMAND QUALIFIERS

BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LIS\$:CNFSHOW/OBJ=OBJ\$:CNFSHOW MSRC\$:CNFSHOW/UPDATE=(ENHS:CNFSHOW)

: Size: 909 code + 188 data bytes
: Run Time: 00:23.1
: Elapsed Time: 00:39.7
: Lines/CPU Min: 2282
: Lexemes/CPU-Min: 19848
: Memory Used: 182 pages
: Compilation Complete

0280 AH-BT13A-SE
VAX/VMS V4.0

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